Important Advances in Clinical Medicine

Epitomes of Progress -- Plastic Surgery

The Scientific Board of the California Medical Association presents the following inventory of items of progress in Plastic Surgery. Each item, in the judgment of a panel of knowledgeable physicians, has recently become reasonably firmly established, both as to scientific fact and important clinical significance. The items are presented in simple epitome and an authoritative reference, both to the item itself and to the subject as a whole is generally given for those who may be unfamiliar with a particular item. The purpose is to assist the busy practitioner, student, research worker or scholar to stay abreast of these items of progress in Plastic Surgery which have recently achieved a substantial degree of authoritative acceptance, whether in his own field of special interest or another.

The items of progress listed below were selected by the Advisory Panel to the Section on Plastic Surgery of the California Medical Association and the summaries were prepared under its direction.

Recent Advances in Microsurgery

The transplantation of tissue by microsurgical techniques is gradually evolving from an experimental laboratory technique to a clinical procedure. Over the past several years, numerous workers have demonstrated that large blocks of composite tissue can be transplanted on reanastomosed small vessels and nerves. The rat's leg, kidney and the liver have all been successfully transplanted or reimplanted. Small island flaps have also been transplanted from the abdomen to the neck in rats. The rabbit's ear has been transplanted and reimplanted on numerous occasions, and digits and toes have been transposed and transplanted in monkeys. The recent successful replantation of an amputated thumb by Tamai in Japan attests the clinical applicability of these techniques. Cobbett of England electively transplanted a human toe to the hand, opening up a new field of clinical digital reconstruction. Several workers have attempted to transplant large composite flaps in humans, with variable success. Once the proper donor areas have been delineated, immediate flap transplantation from one area of the body to another should become a clinical fact. Many problems must be solved in the field of instrumentation

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for microsurgery. The Australians seem to be making great strides in this direction.

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Physician's Assistants Training Program

Plastic surgeons have begun to train physician's assistants. California is the first state in which certified graduates of approved programs will be permitted to function, under the supervision of a physician under Chapter 1327 of the Business and Professions Code. The duties of the assistant are left to the discretion of his employer.

Working closely with the California Medical Association and the California Academy of General Practice, we have formulated a program at Stanford based upon the simple principle that physicians must be the ultimate instructors and the public the ultimate beneficiaries of such an effort.

Preference is given to men and women willing to become extra hands and sensory organs in rural California where the physician-to-population ratio is hardly adequate. We are now recruiting for both phases of the project: Level I, A General Clerkship – designed to give intelligent, highly motivated but economically disadvantaged individuals a 12-month exposure to clinical and emergency medicine to evaluate their commitment to patient care; Level II, The Physician's Assistant Project – which will accept graduates of Level I for intensive, task-oriented teaching at Stanford and on-the-job clinical training under physician-preceptors in the community. Individuals who have already demonstrated their desire to continue a health career, such as the 6,000 independent duty corpsmen discharged by the military each year or other health personnel (there are 285,000 inactive registered nurses in the nation), will be admitted to Level II with advanced standing.

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Social Responsibilities of the Plastic Surgeon

The medical profession of this country takes the position that good health is a right and not a privilege. We in plastic and reconstructive surgery feel the same way about normality of appearance and function. Because our results are often inextricably linked with personality problems, self esteem, body image, and the like, our social responsibility is obvious. Even within the category of "cosmetic" surgery, where is the line between acceptable normal variation and psychologically significant abnormality? Abnormality about the face that cannot be covered or camouflaged is closely linked with emotional well-being. Both aesthetic and functional deformity have a direct impact on economic status. Here are four examples:

- A suicidal 22-year-old girl with a disfiguring traumatic facial deformity.
- A successful cure of cancer, but with a large void in the orbital region.
- A child with a grotesque cleft lip and palate deformity with poor speech.
- A burn victim who cannot use his hands.

All four patients have in common a dependence on the reconstructive surgeon whose duty it is to restore them as close to normal as possible.

In many California prisons, rehabilitation includes plastic surgery. Early results seem encour-